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EXAMINER	
KASSA, HILINA S	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/645,400	SAIDA, YUKIHIRO	
	Examiner	Art Unit	
	HILINA S. KASSA	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 January 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4,5,7-9,12-15 and 17-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4,5,7-9,12-15 and 17-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 August 2003* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *01/07/2008*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 01/07/2008 is being considered by the examiner.

Drawings

2. Figures 2-4 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Response to Arguments

3. The Examiner also acknowledges the amended claims1 and 9, the newly added claims 17-24 and the cancelled claims 2-3, 6, 10-11 and 14.

4. Applicant's arguments with respect to claims 1 and 9 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1, 4-5, 9, 12-13 and 17-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiroaki (Japanese Publication Number 2001-018492) in view of Stumbo et al. (US Patent Number 6,084,688).

(1) regarding claim 1:

As shown in figure 1, Hiroaki discloses an image forming system comprising:

a host having a communication function unit (**100, figure 1**); and

an image forming apparatus (**500, figure 1**) having a first communication unit (**I-A, figure 1**), a second communication unit (**II-A, figure 2**), and a relay unit (**200, figure 1; the data controller unit is considered as the relay unit**),

wherein said first communication unit communicates data with said communication function unit via said relay unit (**paragraph 21, lines 6-10; note that data control unit communicates with the host computer 100 by utilizing first communication unit**) and said second communication unit communicates the data with said communication function unit via said relay unit (**paragraph 21, lines 10-13; note that the data control unit also perform packet communication between the host by utilizing second communication unit**).

Hiroaki disclose all of the subject matter as described as above except for specifically teaching said first communication unit communicates data in a first page description language PDL and said second communication unit communicates data in a second PDL different from the first PDL.

However, Stumbo et al. disclose a first communication unit communicates data in a first page description language PDL (**16a, figure 1; column 4, lines 26-30; note that the decomposer facility has PDL decomposer which is responsible for interpreting PCL commands**) and said second communication unit communicates data in a second PDL different from the first PDL (**16b, figure 1; column 4, lines 30-43; note that Adobe Extreme decomposers PostScript is disclosed as the second PDL format which is different than the first one**).

Hiroaki and Stumbo et al. are combinable because they are from the same field of endeavor i.e. network printing. At the time of the invention, it would have been obvious to a person of ordinary skilled in the art to have first communication unit communicates data in a first page description language PDL and second communication unit communicates data in a second PDL different from the first PDL. The suggestion/motivation for doing so would have been in order to independently decompose a page image by utilizing different decomposers of PDL (column 3, lines 24-29). Therefore, it would have been obvious to combine Hiroaki with Stumbo et al. to obtain the invention as specified in claim 1.

(2) regarding claim 4:

Hiroaki further discloses, the image forming system according to claim 1, wherein said image forming apparatus has a function information communication unit which communicates function information of at least one of said first and second communication units via said relay unit (**300, 200, I-A, II-A, figure 1; paragraph 21, lines 6-10; note that the data control unit 200 is considered as the relay unit**), and said host obtains the function information from said function information communication unit via said relay unit by said communication function unit (**100, 200, I-A, figure 1; paragraph 21, lines 7-8**), discriminates whether said function information corresponds to the host or not, and if it does not correspond to the host, notifies of such a fact (**paragraph 26, lines 1-8; note that there is a status inquiry that denotes if the packets gets transmitted to the host**).

(3) regarding claim 5:

Hiroaki further discloses, the image forming system according to claim 4, wherein when a function information obtaining request of at least one of said first and second communication units is received from said host (**paragraph 21, lines 6-8**), said function information communication unit communicates function information of a processing apparatus connected to the relevant communication unit via said relay unit (**paragraph 21, lines 6-10; note that the host and printer communicate via the data control unit**).

(4) regarding claim 17:

Hiroaki disclose all of the subject matter as described as above except for specifically teaching, wherein the image forming system further includes a first language processing unit that processes data received by the first communication unit as the first PDL, and a second language processing unit that processes data received by the second communication unit as the second PDL.

However, Stumbo et al. disclose wherein the image forming system further includes a first language processing unit that processes data received by the first communication unit as the first PDL (**50, figure 1; column 4, lines 28-30; note that the PCL decomposer is considered as the first processor**), and a second language processing unit that processes data received by the second communication unit as the second PDL (**30a-30c, figure 1; column 4, line 66-column 5, line 4; note that the decomposers 30a-30c are considered as the second processors**).

Hiroaki and Stumbo et al. are combinable because they are from the same field of endeavor i.e. network printing. At the time of the invention, it would have been obvious to a person of ordinary skilled in the art wherein the image forming system further includes a first language processing unit that processes data received by the first communication unit as the first PDL, and a second language processing unit that processes data received by the second communication unit as the second PDL. The suggestion/motivation for doing so would have been in order to independently decompose a page image by utilizing different decomposers of PDL (column 3, lines 24-

29). Therefore, it would have been obvious to combine Hiroaki with Stumbo et al. to obtain the invention as specified in claim 17.

(5) regarding claim 18:

Hiroaki disclose all of the subject matter as described as above except for specifically teaching, wherein the image forming system further includes a development processing unit that converts a display list processed by the first language processing unit and a display list processed by the second language processing unit into image data and sends the image data to an engine.

However, Stumbo et al. disclose wherein the image forming system further includes a development processing unit that converts a display list processed by the first language processing unit (**column 8, lines 25-35; note that the buffer manager 40 of figure 1, keeps a list of the processed jobs according to the first or second language processing unit**) and a display list processed by the second language processing unit into image data and sends the image data to an engine (**column 8, lines 29-31; note that according to desired the list could be printed by the printing apparatus**).

Hiroaki and Stumbo et al. are combinable because they are from the same field of endeavor i.e. network printing. At the time of the invention, it would have been obvious to a person of ordinary skilled in the art wherein the image forming system further includes a development processing unit that converts a display list processed by

the first language processing unit and a display list processed by the second language processing unit into image data and sends the image data to an engine. The suggestion/motivation for doing so would have been in order to efficiently organize and manage the processed jobs. Therefore, it would have been obvious to combine Hiroaki with Stumbo et al. to obtain the invention as specified in claim 18.

(6) regarding claim 19:

Hiroaki discloses wherein the host further includes a first printer driver that converts and output of an application into the first PDL (**paragraph [0024], lines 2-5; note that the printer deriver generates graphics data as raster data according to the printing resolution of the printer i.e. considered as first PDL**), and a second printer driver that converts the output of the application into the second PDL different from the first PDL (**paragraph [0024], lines 5-8; note that if command interpreter commands to convert the data to PCL then the packed will be decomposed into tow or more packets which consists of the predetermined number of bits**).

(7) regarding claim 20:

Hiroaki disclose all of the subject matter as described as above except for specifically teaching, wherein the image forming system further includes a first buffer that stores data received by the first communication unit in the first PDL, and a second buffer that stores data received by the second communication unit in the second PDL.

However, Stumbo et al. disclose wherein the image forming system further includes a first buffer that stores data received by the first communication unit in the first PDL (**column 9, lines 58-63; note that the decomposer facility has a buffer**), and a second buffer that stores data received by the second communication unit in the second PDL (**column 9, line 67-column 10, line 6; note that the different types of PDL have buffer memory as also shown in figure 3**).

Hiroaki and Stumbo et al. are combinable because they are from the same field of endeavor i.e. network printing. At the time of the invention, it would have been obvious to a person of ordinary skilled in the art wherein the image forming system further includes a first buffer that stores data received by the first communication unit in the first PDL, and a second buffer that stores data received by the second communication unit in the second PDL. The suggestion/motivation for doing so would have been in order to efficiently organize, manage and store the processed jobs. Therefore, it would have been obvious to combine Hiroaki with Stumbo et al. to obtain the invention as specified in claim 20.

7. Claims 9, 12-13 and 21-24 recite identical feature as claims 1, 4-5 and 17-20 except claims 9, 12-13 and 21-24 are method claims. Thus, arguments similar to that presented above for claims 1, 4-5 and 17-20 are also equally applicable.

8. Claims 7-8 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiroaki (Japanese Publication Number 2001-018492) and Stumbo et al. (US

Patent Number 6,084,688) as applied to claims 1 and 9 above, and further in view of Hosoda et al. (US Patent Number 6,914,687 B1).

(1) regarding claims 7:

Hiroaki and Stumbo et al. disclose all of the subject matter as described as above except for teaching wherein said relay unit and said host are connected by a set of I/F capable of receiving and transmitting.

However, Hosoda et al. teach wherein said relay unit and said host are connected by a set of I/F capable of receiving and transmitting (**column 21, lines 59-62; note that the relay unit which is part of the printer and the host could be connected by universal interface**).

Hiroaki, Stumbo et al. and Hosoda et al. are combinable because they are from the same field of endeavor i.e. network printing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have a universal interface I/F that connects the printer with the host. The suggestion/motivation for doing so would have been that it establishes higher information transfer rate (column 22, lines 1-7). Therefore, it would have been obvious to combine Hiroaki with Hosoda et al. to obtain the invention as specified in claim 7.

(2) regarding claims 8:

Hiroaki and Stumbo et al. disclose all of the subject matter as described as above except for teaching wherein said relay unit and said host are connected by an I/F cable of USB.

However, Hosoda et al. teach wherein said relay unit and said host are connected by an I/F cable of USB (**column 21, lines 59-64; note that the printer can be connected to host computer by universal interface USB**).

Hiroaki, Stumbo et al. and Hosoda et al. are combinable because they are from the same field of endeavor i.e. network printing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have a universal interface cable of USB. The suggestion/motivation for doing so would have been that USB interface is versatile enough for a wide range of peripheral devices and it is the standard way to communicate two devices. Therefore, it would have been obvious to combine Hiroaki with Hosoda et al. to obtain the invention as specified in claim 8.

9. Claims 15-16 recite identical feature as claims 7-8 except claims 15-16 are method claims. Thus, arguments similar to that presented above for claims 7-8 are also equally applicable.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Hilina Kassa whose telephone number is (571) 270-1676.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore could be reached at (571) 272- 7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about PAIR system, see http://pari-direct.uspto.gov. Should you have

questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hilina S Kassa/

Examiner, Art Unit 2625

March 25, 2008

/Gabriel I Garcia/

Acting SPE of Art Unit 2625